



2023 Teaching & Learning Conference

Assessment and Feedback for Student Success

Conference Abstract

Wednesday 12th July, Pecha Kucha, 14:30 -15:00

Bridging the attainment gap between undergraduate Criminology with Forensic Science students and their Forensic Science peers for separation science calculation questions

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Anecdotal evidence suggested BA in Criminology with Forensic Science (Crim with FS) students on the mandatory Year 1 (Level 4) Module 400060 Introduction to DNA and Chromatography find separation science calculation questions more challenging than their BSc in Forensic Science (FS) counterparts. Was this actually true though and, if so, what can be done to bridge the attainment gap? It was investigated by comparing performance for both sets of students on separation science calculation questions over three successive years.

The focus of this initial study was a chromatography assignment worth 50% of the summative assessment for the module. This consisted of ten short-answer questions of which two or three were calculation questions. No studies were found in the literature comparing the performance of criminology students with forensic science students at answering separation science calculations. A non-Gaussian distribution of the students' scores was found. Consequently, the median was considered as the measure of central tendency and the data were scrutinised for general trends.

In four out of eight different cases, the Crim with FS students did worse (scored lower) than the FS students. For three out of eight cases, the Crim with FS students scored the same as the FS students. In one case, the Crim with FS students did better (scored higher) than the FS students. In conclusion, the Crim with FS students were doing worse than the FS students at separation science calculation questions.

This has future implications, as the Crim with FS students perform calculations on assessments for mandatory forensic science modules in Year 2 (Level 5) and Year 3 (Level 6), which count towards their final degree classification. Extra support with calculation questions could be provided for the Crim with FS students in the future. This could take the form, for example, of peer-assisted student support from PASS Leaders.